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Nesting event of the Cicadabird *Coracina tenuirostris* in the Northern Territory

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Although found in a variety of habitats within Australia, including rainforests, paperbark woodlands, wet and dry sclerophyll forests and mangroves (Higgins & Peters 2006), Cicadabirds *Coracina tenuirostris* are generally confined to high rainfall areas. In Australia, two subspecies exist which can be distinguished by call and size (Higgins & Peters 2006; Schodde & Mason 1999). The northern subspecies *melvillensis* is smaller and has a slower song compared to the subspecies *tenuirostris* found along the east coast. *Coracina t. melvillensis* occurs mostly close to the coast north of the 16°S parallel, from the King Leopold Range in northern Western Australia across to Cooktown in northern Queensland (Schodde & Mason 1999). Recorded densities of Cicadabirds vary considerably between *C. t. tenuirostris* and *C. t. melvillensis*, being 0.1–0.5 and 0.08 birds per hectare respectively (Higgins & Peters 2006).

Breeding records for Cicadabirds are few (Higgins & Peters 2006) and are all for *C. t. tenuirostris* except for one record of *melvillensis* from 40 km south of Darwin (Noske *et al.* 1997); this particular nest was located in December 1997, and was situated six metres above the ground in a Yellow-barked Paperbark *Melaleuca nervosa*.

The following observations were of a pair of Cicadabirds nesting at Girraween Lagoon (12°31'02"S, 131°04'58"E), 30 km ESE of Darwin, Northern Territory. The habitat was regenerating, open tropical savannah dominated by Ironwood *Erythrophleum chlorostachys*, Swamp Mahogany *Lophostemon lactifluus*, Woollybutt *Eucalyptus miniata* and Long-fruited Bloodwood *Corymbia polycarpa*. The understorey consisted of native grasses punctuated by sparse *Pandanus spiralis* and *Grevillea decurrens*. The site is adjacent to a permanent lagoon and rural residential allotments. Observations from the ground were for periods of less than 15 minutes on four days. On five days, observations were also made from an adjacent Ironwood tree, approximately 18 m distant and at a height of 8–9 m, during photography sessions lasting 1–2 hours.

On 18 December 2007, the distinctive call of a Cicadabird was heard and a male was observed to fly in the direction of a 14 m tall Ironwood tree. Located approximately 10 m above the ground between a near horizontal fork, the male was observed with its breast lowered (for bracing) and feet used to turn in an anti-clockwise direction, suggesting shaping during nest building. Nesting was confirmed on 23 December and again on 1 January when a female Cicadabird was observed sitting (Figure 1a) in the

same fork. On 12 January, the female vacated the nest immediately after the male arrived to feed a single chick which, due to the size of its head and shoulders, appeared to be up to three days old. By 19 January, the chick had emergent feathers visible on the crown, wings and tail through the pale ashy-grey down and by 30 January the chick showed considerable activity including reorientation about the nest and wing stretching. The chick was in the nest on the morning of 2 February (Figure 1b), but late on the next day, following a 30 minute search of the immediate vicinity, neither the chick nor parents were seen or heard. I presumed fledging to have occurred, however loss due to predation could not be ruled out.

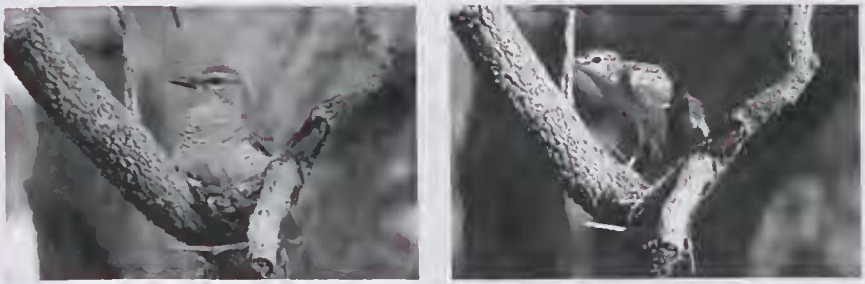

Figure 1. Female Cicadabird *Coracina tenuirostris* brooding while facing toward the outer canopy of an Ironwood *Erythrophleum chlorostachys* (left panel). Cicadabird chick stretching its wing on 2 February 2008 (right panel). (Ashley Carlson)

The nest was typical of *Coracina* species in being a shallow saucer, approximately 7 cm in diameter based on the relative size of the bird. It was built of thin bark strips and twigs bound together with cobweb and decorated with lichen. The nest was barely visible from below, blending with the fissured texture of the Ironwood. Access to the nest for close inspection was not possible due to the height and growth habit of the nest tree. Only the female was observed incubating and brooding. She was always observed facing towards the outer tree canopy as also noted by Purnell (1972). During all observations the female remained alert turning her head from side to side, including during photography sessions.

All feeding events consisted of a cautious approach to the nest by both the male and female. After landing in the upper canopy of the nest tree, the parents would stagger their descent over 2–3 stages taking several minutes to alight on the lead branch approximately 1 m below the nest. Feeding was of short duration, with no audible sounds or begging motions shown by the chick. The male departed immediately following feeding, while the female remained to either continue brooding or collect and swallow a faecal sac, produced after every second or third feeding and which followed several tail pumping actions from the chick. On 26 January, the female fed

the nestling twice in approximately one hour. On 28 January, the female fed the nestling three times, and the male once, during approximately two hours. This would suggest a feeding rate of approximately 2 times per hour, which is at the higher end of those observed by Marchant (1979). From at least 19 January, food was delivered crossways in the beak, allowing identification of Lepidoptera larvae and a grasshopper (Orthoptera).

The only foraging observation was of the male in a sapling approximately 20 m from the nest tree. The bird was observed hopping in small steps along a branch whilst cocking its head from side to side as well as hovering over leaves on the outside of the canopy. Defence of the nest was observed on 23 December when the male swooped at a White-bellied Cuckoo-Shrike *Coracina papuensis* to drive it away from the immediate vicinity, and on 28 January a Varied Triller *Lalage leucomela* was swooped. On both occasions, the Cicadabird gave a harsh rasp as it swooped. Activity interpreted as aggression directed towards me during photography sessions was noted on 26 and 28 January and 2 February. On these occasions, the female flew within 50 cm of me while emitting a grating buzz. These acts followed immediately after feeding the nestling.

Based on dates of nest building and the assumed age of the chick on 12 January, the incubation period is estimated to be between 17 and 23 days, which is consistent with Marchant's (1979, 1985) report of 22 days. Based on the assumed age of the chick on 12 January and that the chick fledged on either 2 or 3 February, the nestling period is between 22 and 24 days. This is less than Marchant's (1979) report of 27 days, but similar to his subsequent observation of 19 to 22 days (Marchant 1985).

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References

Higgins P.J. and Peters J.M. eds (2006) *Handbook of Australian, New Zealand and Antarctic Birds. Volume 7. Yellow-breasted Boatbill to Starling.* Oxford University Press, Melbourne.

Marchant S. (1979) Nesting of the Cicadabird *Coracina tenuirostris. Ibis* 121, 80-84.

Marchant S. (1985) Incubation routine in the Cicadabird. *Australian Birds* 20, 18.

Noske R.A., Barnes T.A. and Barnes V. (1997) First breeding record of the Cicadabird in the Northern Territory. *Northern Territory Naturalist* 15, 43-44.

Purnell J. (1972) Notes on the Cicadabird. *Australian Birds* 7, 19-20.

Schodde R. and Mason I.J. (1999) *The Directory of Australian Birds.* CSIRO Publishing, Collingwood.